Material Safety Data Sheet
Zinc, Powder, -200 Mesh, 99.9999\%

MSDS\# 96932

MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:

Company Identification: (USA)

For information in the US, call:
For information in Europe, call:
Emergency Number, Europe:
Emergency Number US:
CHEMTREC Phone Number, US:
CHEMTREC Phone Number, Europe:

## Section 1 - Chemical Product and Company Identification

Zinc, Powder, -200 Mesh, 99.9999\%
AC194500000, AC194500050, AC194501000
None

Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
800-ACROS-01
+32 14575211
+32 14575299
201-796-7100
800-424-9300
703-527-3887

Section 2 - Composition, Information on Ingredients

CAS\#:
Chemical Name:
\%:
EINECS\#:

Hazard Symbols:


Risk Phrases:

7440-66-6
Zinc
99.9999

231-175-3

F

1517

Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Danger! Water-reactive. Causes eye and skin irritation. Causes digestive and respiratory tract irritation. May ignite or explode on contact with moist air. Reacts violently and/or explosively with water, steam or moisture. Target Organs: Kidneys.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation.
Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.
Chronic: Repeated inhalation may cause chronic bronchitis.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Ingestion:
Inhalation:
Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to
Physician:
Antidote:

General Information:

Extinguishing
Media:
The use of Calcium disodium EDTA as a chelating agent should be determined by qualified medical personnel.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Water reactive. Material will react with water and may release a flammable and/or toxic gas. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. May ignite or explode on contact with steam or moist air.

Use dry sand or earth to smother fire. DO NOT USE WATER! Do NOT get water inside containers. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out.

Autoignition
$460 \operatorname{deg} \mathrm{C}$ ( 860.00 deg F )
Flash Point: Not available
Explosion Not available
Limits: Lower:
Explosion
Limits: Upper:
Not available
NFPA Rating: ; Special Hazard: -W-

## Section 6 - Accidental Release Measures

## General

Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not expose spill to water.

Section 7 - Handling and Storage
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a wellHandling: ventilated area. Do not allow water to get into the container because of violent reaction. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Do not allow contact with water. Keep from contact with moist air and steam.
Storage: Store in a cool, dry place. Keep away from water. Keep containers tightly closed.
Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Zinc: None listed
Engineering Controls:
Use explosion-proof ventilation equipment. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Exposure Limits

Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Follow
Respirators: the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties
Physical State: Solid
Color: slightly gray
Odor: odorless
pH : Not available
Vapor Pressure: 1 mm Hg @ 487C
Vapor Density: Not available
Evaporation Rate: Not applicable
Viscosity: Not applicable
Boiling Point: $908 \operatorname{deg} \mathrm{C}\left(1,666.40^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: $419 \mathrm{deg} \mathrm{C}\left(786.20^{\circ} \mathrm{F}\right)$
Decomposition Temperature: Not available
Solubility in water: Reacts with water
Specific Gravity/Density: 7.14
Molecular Formula: Zn
Molecular Weight: 65.38
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition
Products
Hazardous Polymerization

Stable. Combines vigorously or explosively with water.
Incompatible materials, ignition sources, excess heat, strong oxidants, exposure to moist air or water, mechanical shock.

Not available

Irritating and toxic fumes and gases, toxic fumes of zinc oxide.
Has not been reported.
Section 11 - Toxicological Information

| RTECS\#: | CAS\# 7440-66-6: ZG8600000 |
| :--- | :--- |
| LD50/LC50: | RTECS: Not available. |
| Carcinogenicity: | Zinc - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. |
| Epidemiology: | Not available |
| Teratogenicity: | Not available |
| Reproductive: | Not available |
| Neurotoxicity: | Not available |
| Mutagenicity: | Not available |
| Other: | Not available |

## Section 12 - Ecological Information

Not available

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local
hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information
US DOT
Shipping Name: ZINC POWDER
Hazard Class: 4.3
UN Number: UN1436
Packing Group: II
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS\# 7440-66-6: 1000 lb final RQ (no reporting of releases of this hazardous substa Section 15 - Regulatory Information
US Federal
TSCA
CAS\# 7440-66-6 is listed on the TSCA
Inventory.
Health \& Safety Reporting
List
None of the chemicals are on the Health \& Safety Reporting List.

Rule

Chemical Test Rules
Section 12b
TSCA Significant New Use

CERCLA Hazardous
Substances and
CAS\# 7440-66-6: 1000 lb final RQ (no reporting of releases of this hazardous substance is $r$
corresponding RQs
SARA Section 302
Extremely Hazardous
Substances
SARA Codes
Section 313

Clean Air Act:
None of the chemicals in this product have a TPQ.

CAS \# 7440-66-6: acute.
This material contains Zinc (CAS\# 7440-66-6, 99 9999\%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. None of the chemicals in this product are listed as Hazardous Substances under the CWA.
Clean Water Act: CAS\# 7440-66-6 is listed as a Priority Pollutant under the Clean Water Act. CAS\# 7440-$66-6$ is listed as a Toxic Pollutant under the Clean Water Act.
OSHA:

## STATE

Zinc can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.
California Prop 65
California No Significant Risk Level:

None of the chemicals in this product are under a Chemical Test Rule.
None of the chemicals are listed under TSCA Section 12b.
None of the chemicals in this material have a SNUR under TSCA.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: F
Risk Phrases:
R 15 Contact with water liberates extremely flammable gases.
R 17 Spontaneously flammable in air.

Safety Phrases:
S 7/8 Keep container tightly closed and dry.
WGK (Water Danger/Protection)
CAS\# 7440-66-6: 0

## Canada

CAS\# 7440-66-6 is listed on Canada's DSL List
Canadian WHMIS Classifications: B4, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 7440-66-6 is not listed on Canada's Ingredient Disclosure List.
Section 16-Other Information
MSDS Creation Date: 4/09/1998
Revision \#4 Date 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

